WHAT IS CLAIMED IS:

1. A lubricating oil for compression type refrigerators using 1,1,1,2-tetrafluoroethane as a refrigerant, which comprises, as a main component, a polyoxyalkyleneglycol derivative represented by the general formula:

R4 (OR5) OH

wherein R⁴ is an alkyl group having 1 to 3 carbon atoms, R⁵ is an alkylene group having 2 to 4 carbon atoms, and k is a number of 6 to 80, which has a viscosity at 100°C in the range of 5 to 30 cSt, and which is obtained by polymerizing an alkylene oxide having 2 to 4 carbon atoms with an alkali metal salt of a monohydric alcohol having 1 to 3 carbon atoms as an initiator.

2. A process for producing a lubricating oil for compression type refrigerators which comprises, as a main component, a polyoxyalkyleneglycol derivative represented by the general formula:

R4 (OR5) OH

wherein R⁴ is an alkyl group having 1 to 3 carbon atoms, R⁵ is an alkylene group having 2 to 4 carbon atoms, and k is a number of 6 to 80, and which has a viscosity at 100°C in the range of 5 to 30 cSt, said process comprising polymerizing an alkylene oxide having 2 to 4 carbon atoms with an alkali metal salt of a monohydric alcohol having 1 to 3 carbon atoms as an initiator.